



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

ENGINEERING CHANGE NOTICE NO.

05409

SHEET 1 OF 3

DWG NO. 647.2100

REV: C

PREPARED
BY

J. BECKER

DATE: 06/07/16

EFFECT ON DWG

☐ INC. ☒ UNINC.

DWG TITLE: MOUNTING RAIL

APPROVED BY:

ENGR

MFG

QC

EFF.

NEXT ORDER

REASON: REVISED DIMENSIONS AND ADDED NOTE.

ECR:

N/A

ACTION ITEM:

1.

SHEET 1, NOTES ARE:

NOTES:

1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12

2 FINISH IAW MPP-172, SECTION 3.3 & 4.3; 1-2 MIL MAX

3 DEBURR AND BREAK ALL SHARP EDGES

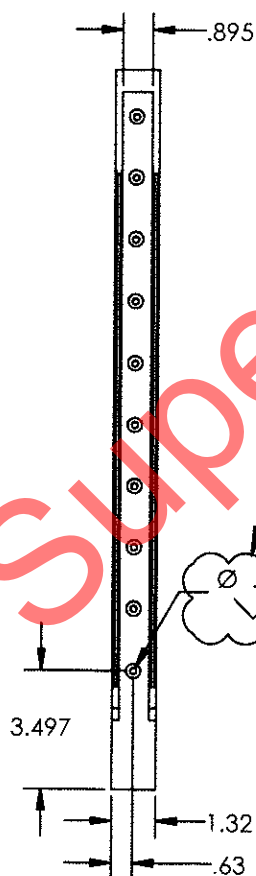
4 IDENTIFY IAW MPP-120.

5 HOLE LOCATIONS CONTROLLED BY 647.2110.

6 HOLE LOCATIONS CONTROLLED BY SOLIDWORKS MODEL
P/N 647.2114, LAST SAVED 02/29/16.

7 HOLE LOCATIONS CONTROLLED BY SOLIDWORKS MODEL
P/N 647.2112.

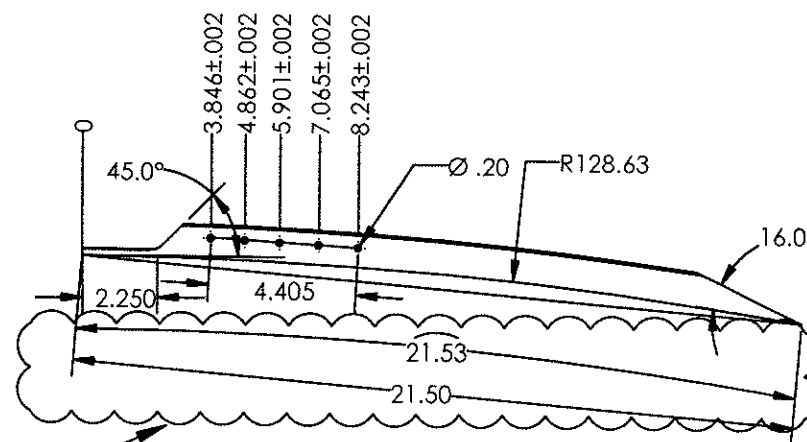
SHEET 3, ZONE C3 IS:



IS

IS

SHEET 3, ZONE D6 IS:



DOCUMENTS EFFECTED:

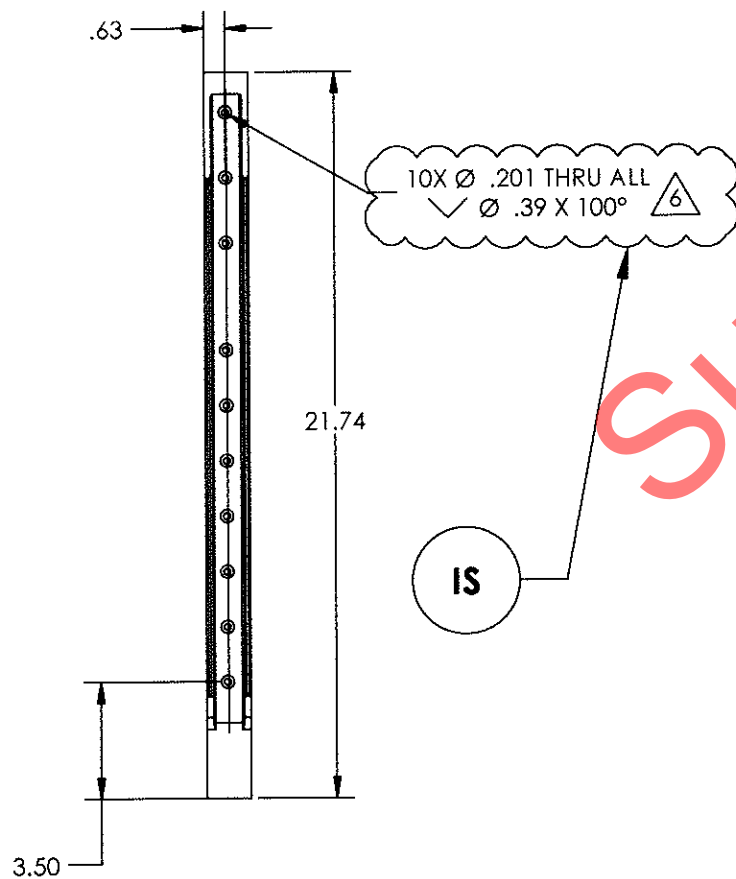
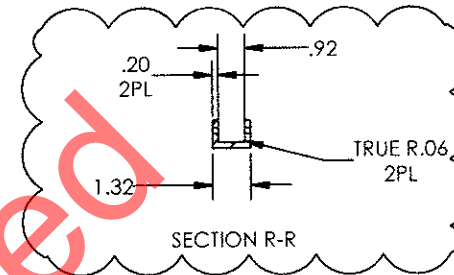
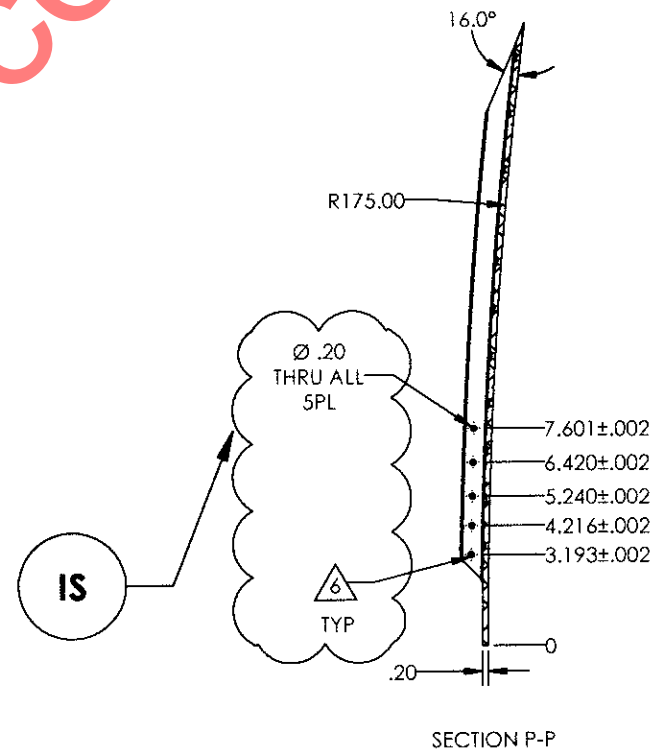
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

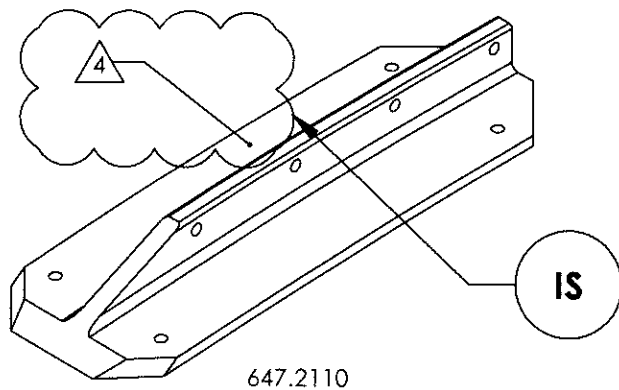
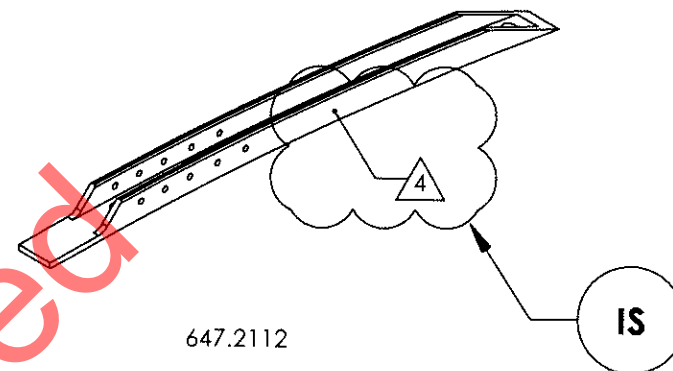
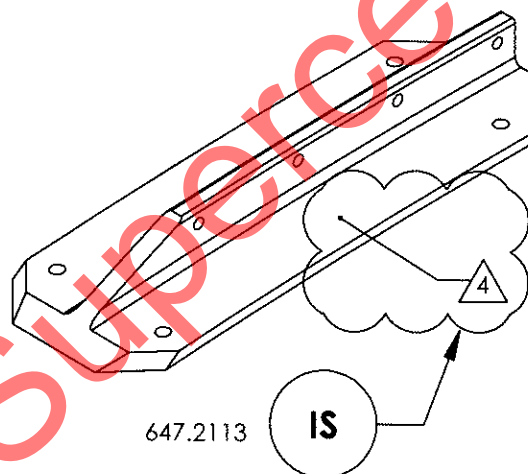
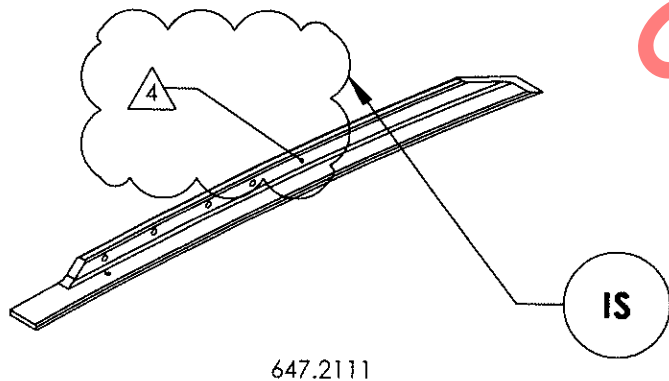
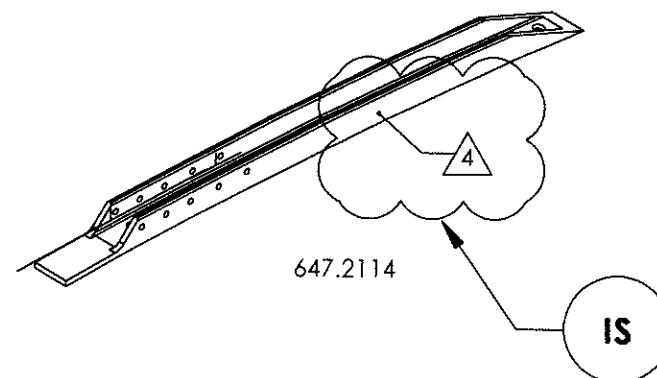
CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

☐ YES ☒ NO

SHEET 5, ZONE B3 IS:**SHEET 5, ZONE A4 IS:****SHEET 5, ZONE C4 IS:**

SHEET 1, ZONE A5 IS:**SHEET 3, ZONE A7 IS:****SHEET 4, ZONE A7 IS:****SHEET 2, ZONE A7 IS:****SHEET 5, ZONE A7 IS:**



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

ENGINEERING CHANGE NOTICE NO.

05368

SHEET 1 OF 1

DWG NO. 647.2100

REV: C

PREPARED BY J. BECKER

DATE: 03/31/16

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: MOUNTING CHANNEL

APPROVED BY:

ENGR

MFG

QC

EFF. NEXT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: REVISED FINISH TO INCLUDE ANODIZE.

ECR:
N/A

ACTION ITEM:
1.

SHEET 1, ZONE C5 IS:

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH IAW MPP-172, SECTION 2.1, 3.3 & 4.3; 1-2 MIL MAX
3. DEBURR AND BREAK ALL SHARP EDGES
4. IDENTIFY IAW MPP-120.
- 5 HOLE LOCATIONS CONTROLLED BY 647.2110.
- 6 HOLE LOCATIONS CONTROLLED BY SOLIDWORKS MODEL
P/N 647.2114, LAST SAVED 02/29/16.

IS

DOCUMENTS EFFECTED:

☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

☐ YES ☒ NO

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
	LAST PROTOTYPE REVISION: PP2		H/C
NC	INITIAL RELEASE	06/05/09	P. BRAVO
A	INCORPORATED ECN 02695, 02961, 03920	06/07/13	P. BRAVO
B	INCORPORATED ECN 03956	07/01/13	P. BRAVO
C	INCORPORATED ECN 05326	02/26/16	P. BRAVO

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH IAW MPP-172, SECTION 3.3 & 4.3; 1-2 MIL MAX
3. DEBURR AND BREAK ALL SHARP EDGES
4. IDENTIFY IAW MPP-120.
- 5 HOLE LOCATIONS CONTROLLED BY 647.2110.
- 6 HOLE LOCATIONS CONTROLLED BY SOLIDWORKS MODEL P/N 647.2114, LAST SAVED 02/29/16.

UNINCORPORATED ECN(S)

05368, 05409

A


B

C

D

SECTION A-A

SECTION B-B

		5	647.2114	UPPER U CHANNEL	△	△		
		4	647.2113	LOWER RAIL	△	△		
		3	647.2112	UPPER U CHANNEL	△	△		
		2	647.2111	UPPER RAIL	△	△		
		1	647.2110	LOWER RAIL	△	△		
		FIND #	PART #	DESCRIPTION	MAT'L	SPEC.		
QTY		PARTS LIST						
NEXT ASSY (S)		ORIGINAL DATE (MO-DA-YR)		 3030 ENTERPRISE CT. SUITE A VISTA, CA. 92081 (760)-724-5300 APICAL INDUSTRIES, INC. dba DART AEROSPACE				
645.1700, 647.1300		DRAWN BY S. HUFF					CHECKER P. BRAVO	
		DRAWING APPROVAL P. BRAVO					06/05/09	
		CONTRACT No.						
		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°						
				MOUNTING RAIL				
				SIZE	CAGE CODE	DWG. NO.		
				B	07MZ6	647.2100		
				SCALE NONE				
				SHEET 1 OF 5				

1 2 3 4 5 6 7 8

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A

B

C

D

.63

C

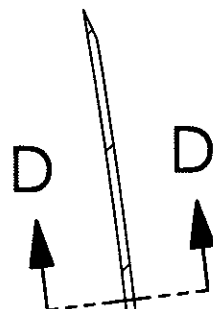
C

$\phi .156$ THRU

1.13

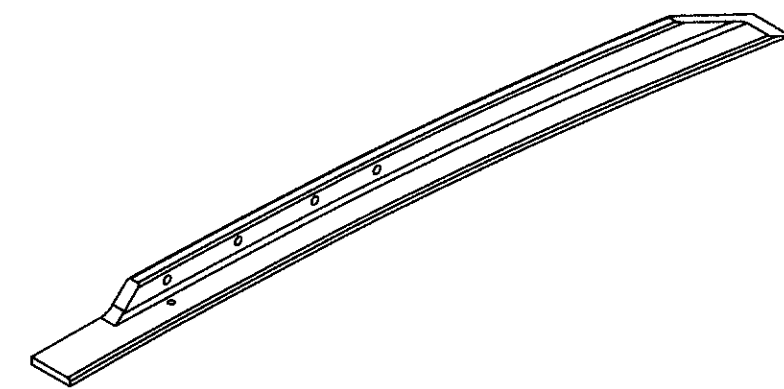
$.340^{+.000}$
 $-.002$

R.06
3 PL
R.10
SECTION D-D

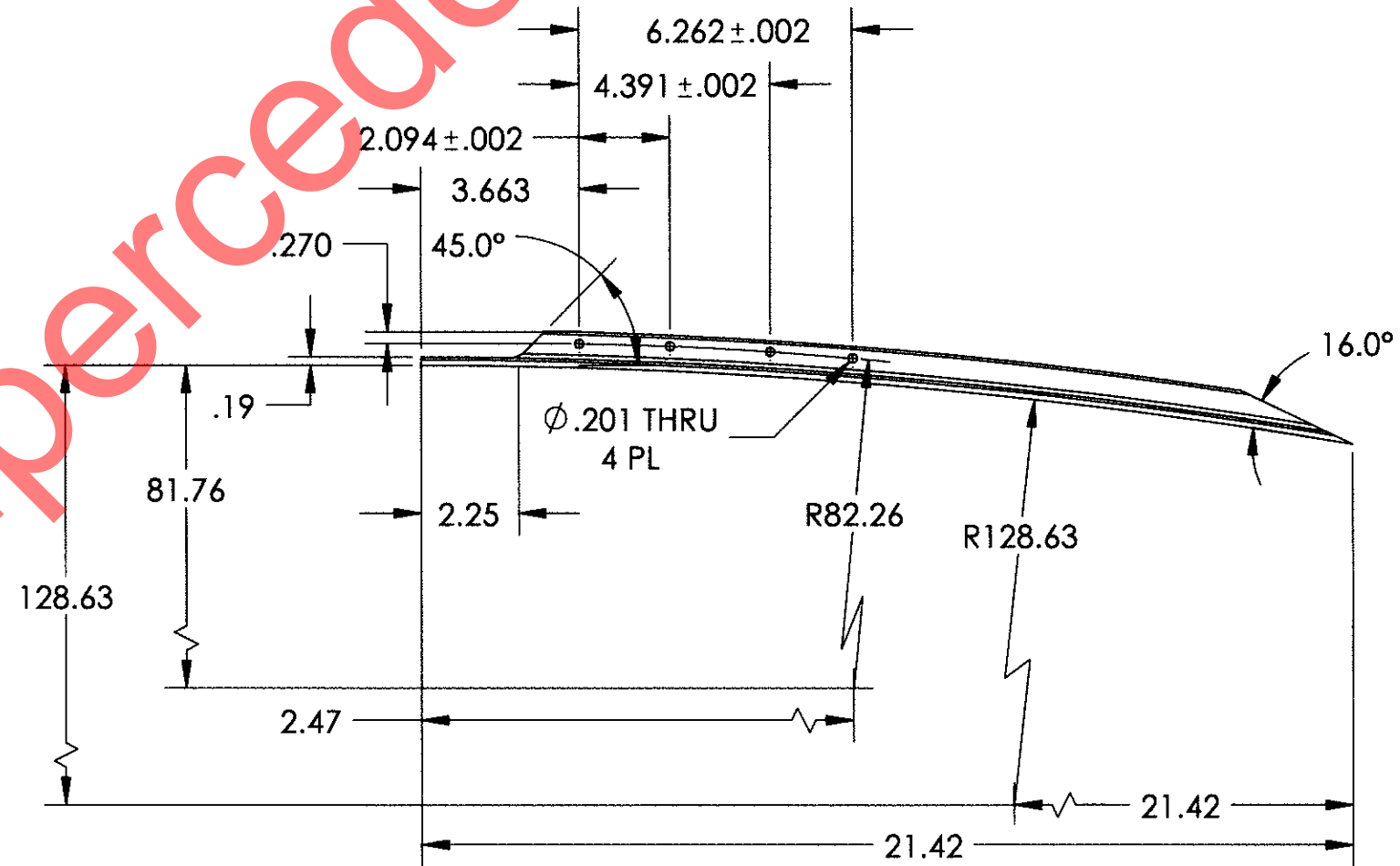


3.50
1.6°

SECTION C-C



647.2111



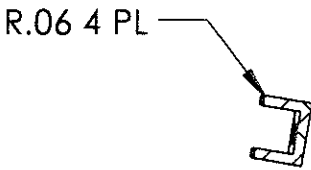
ORIGINAL DATE 08/05/09
DRAWN BY S. HUFF
CHECKER P. BRAVO
DRAWING APPROVAL P. BRAVO
CONTRACT No.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
2 PLACE DECIMALS $\pm .01$
3 PLACE DECIMALS $\pm .005$
ANGLES $\pm .5^\circ$

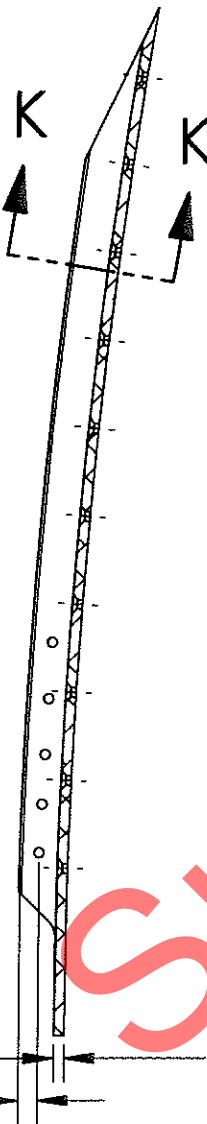
 DART AEROSPACE		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
APICAL INDUSTRIES, INC. dba DART AEROSPACE			
MOUNTING RAIL			
SIZE B	CAGE CODE 07MZ6	DWG. NO. 647.2100	REV. C
SCALE NONE		SHEET 2 OF 5	

1 2 3 4 5 6 7 8

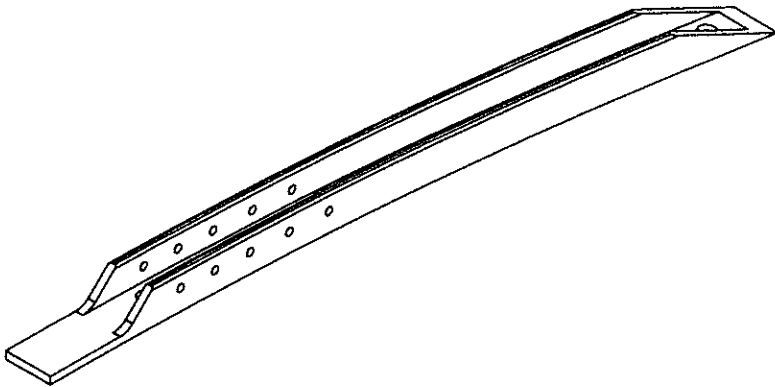
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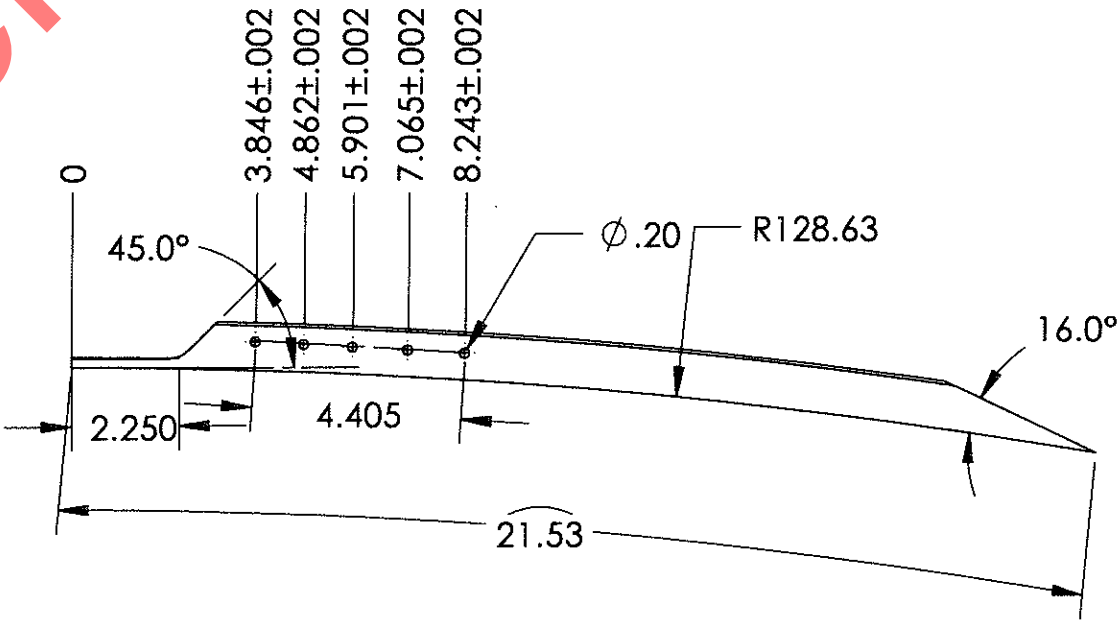
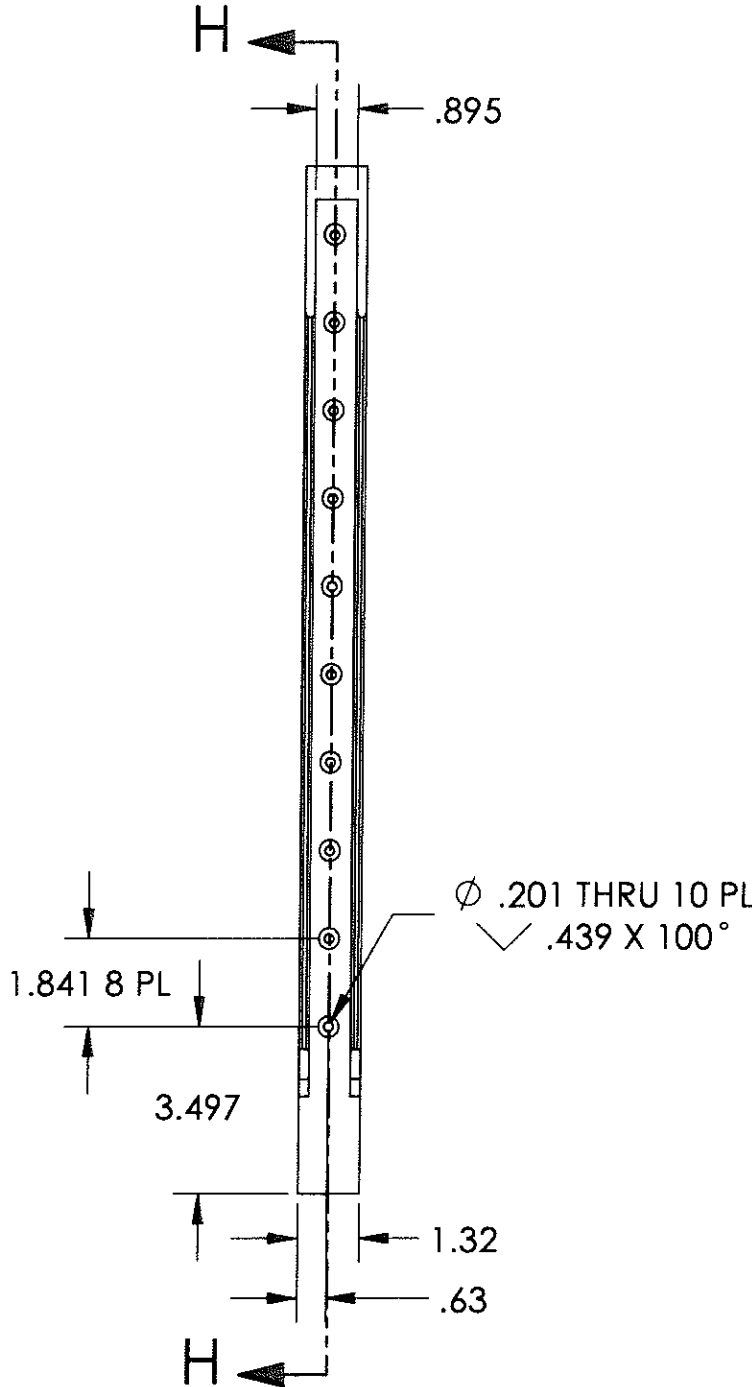
SECTION K-K



SECTION H-H

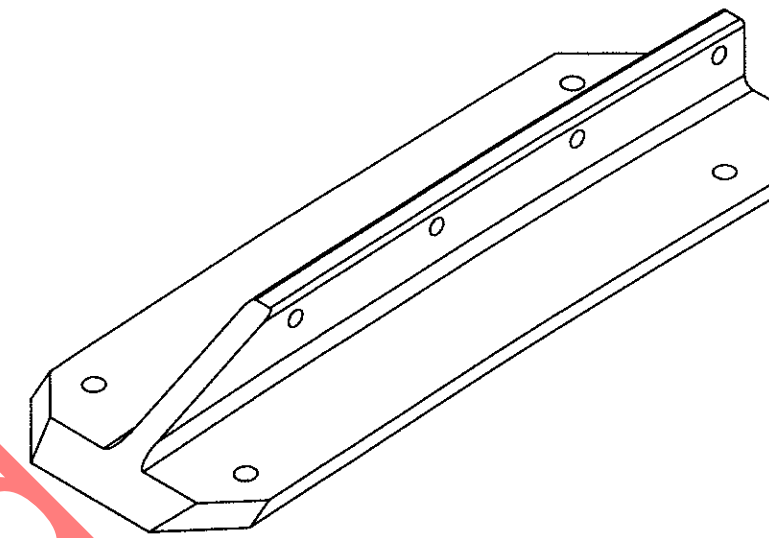
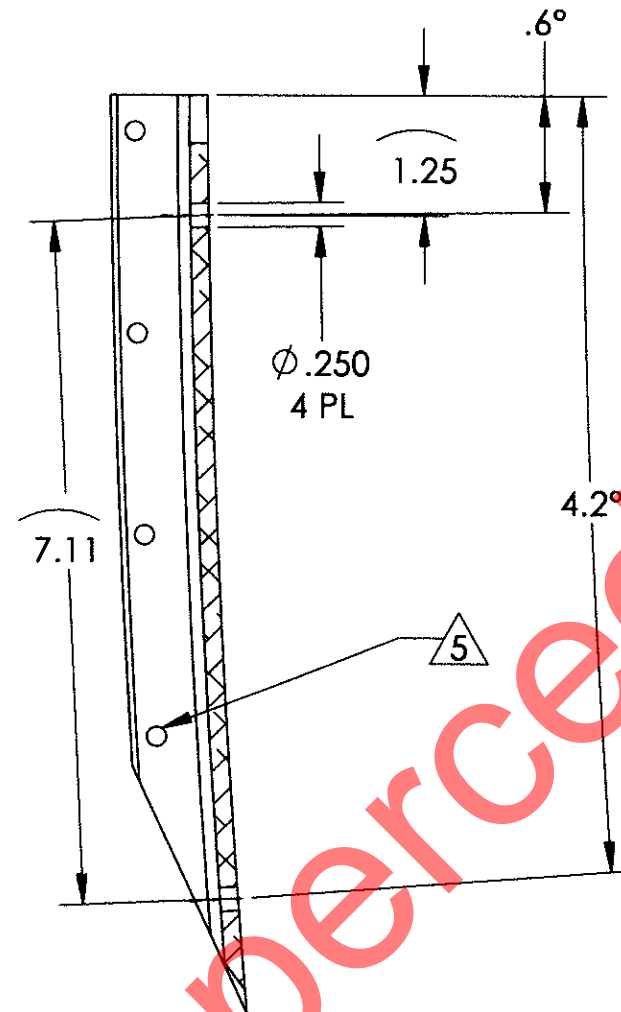
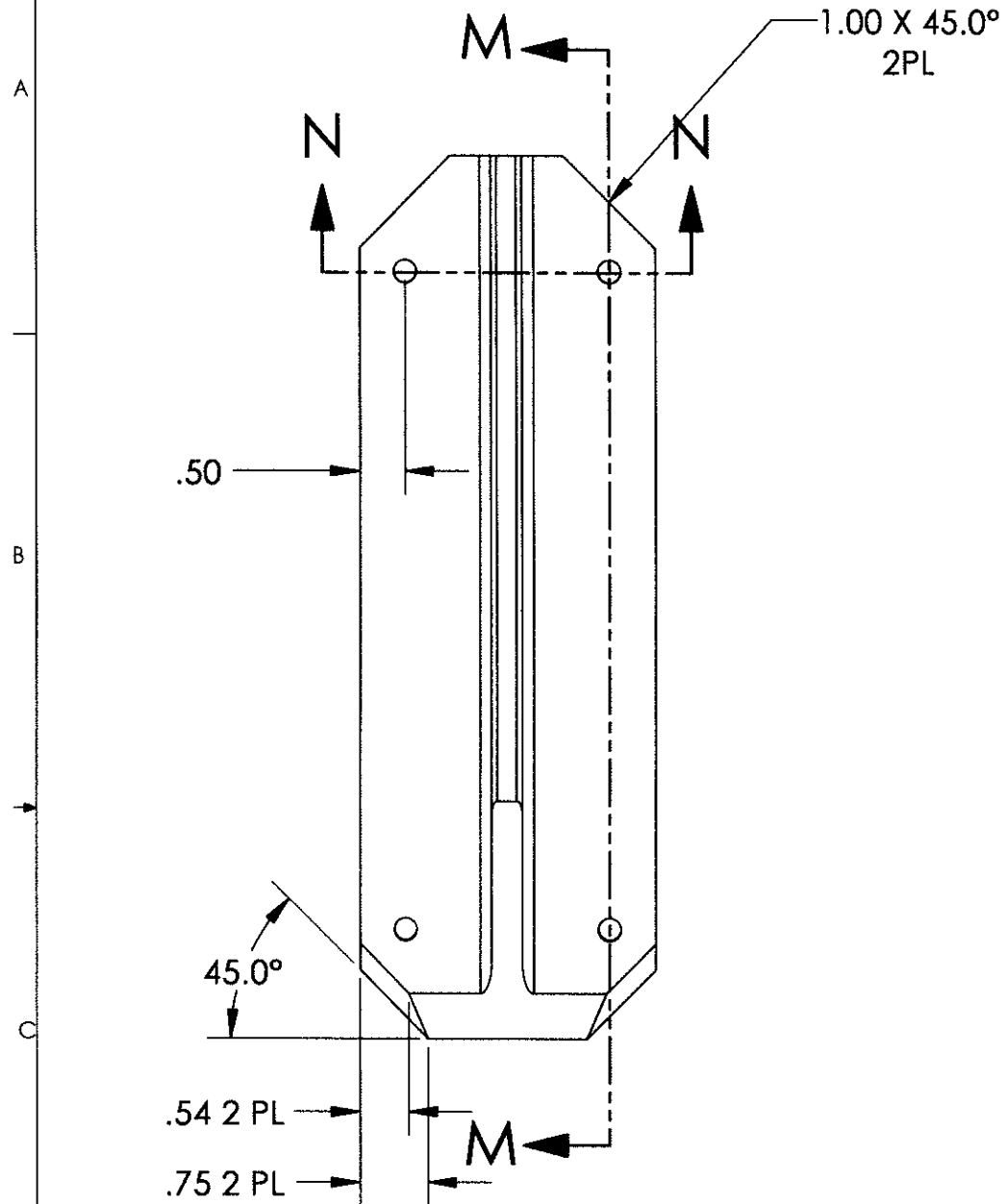


647.2112

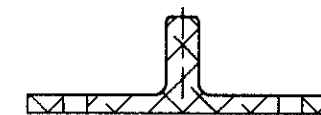


ORIGINAL DATE (MO-DA-YR) 08/05/09	CHECKER P. BRAVO	3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWING APPROVAL P. BRAVO 08/05/09		APICAL INDUSTRIES, INC. dba DART AEROSPACE	
CONTRACT No.		MOUNTING RAIL	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		SIZE B 07M26	DWG. NO. 647.2100 REV. C
SCALE NONE		SHEET 3 OF 5	

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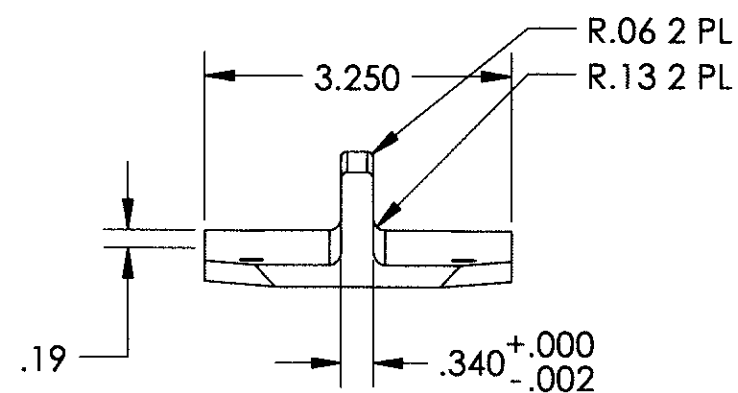


647.2113



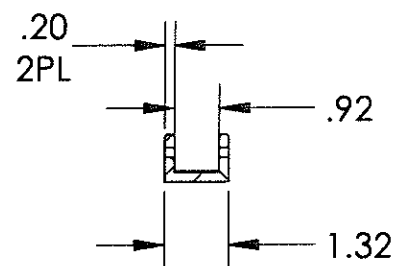
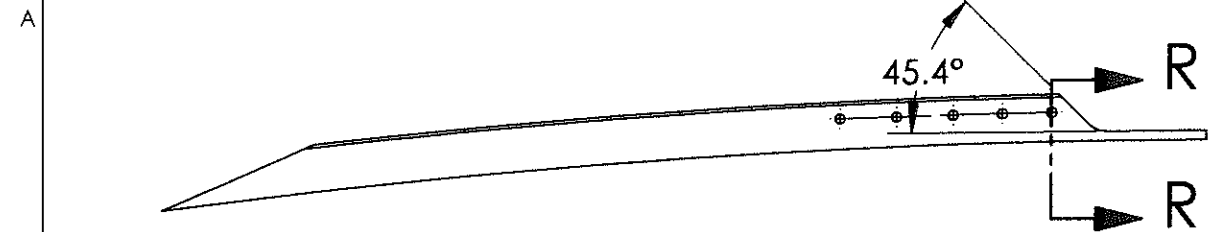
SECTION N-N

SECTION M-M

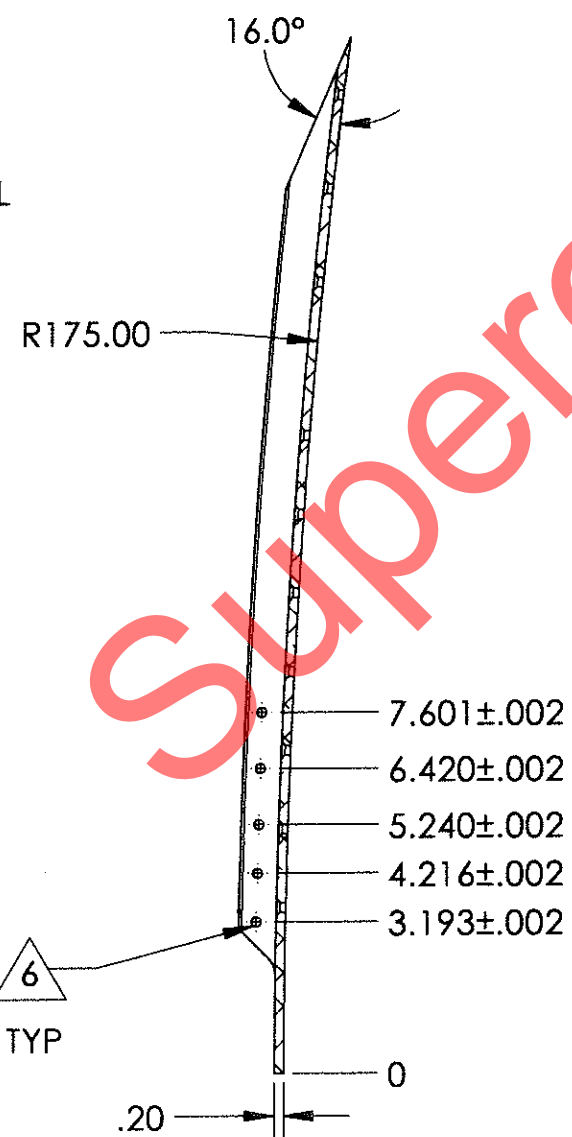
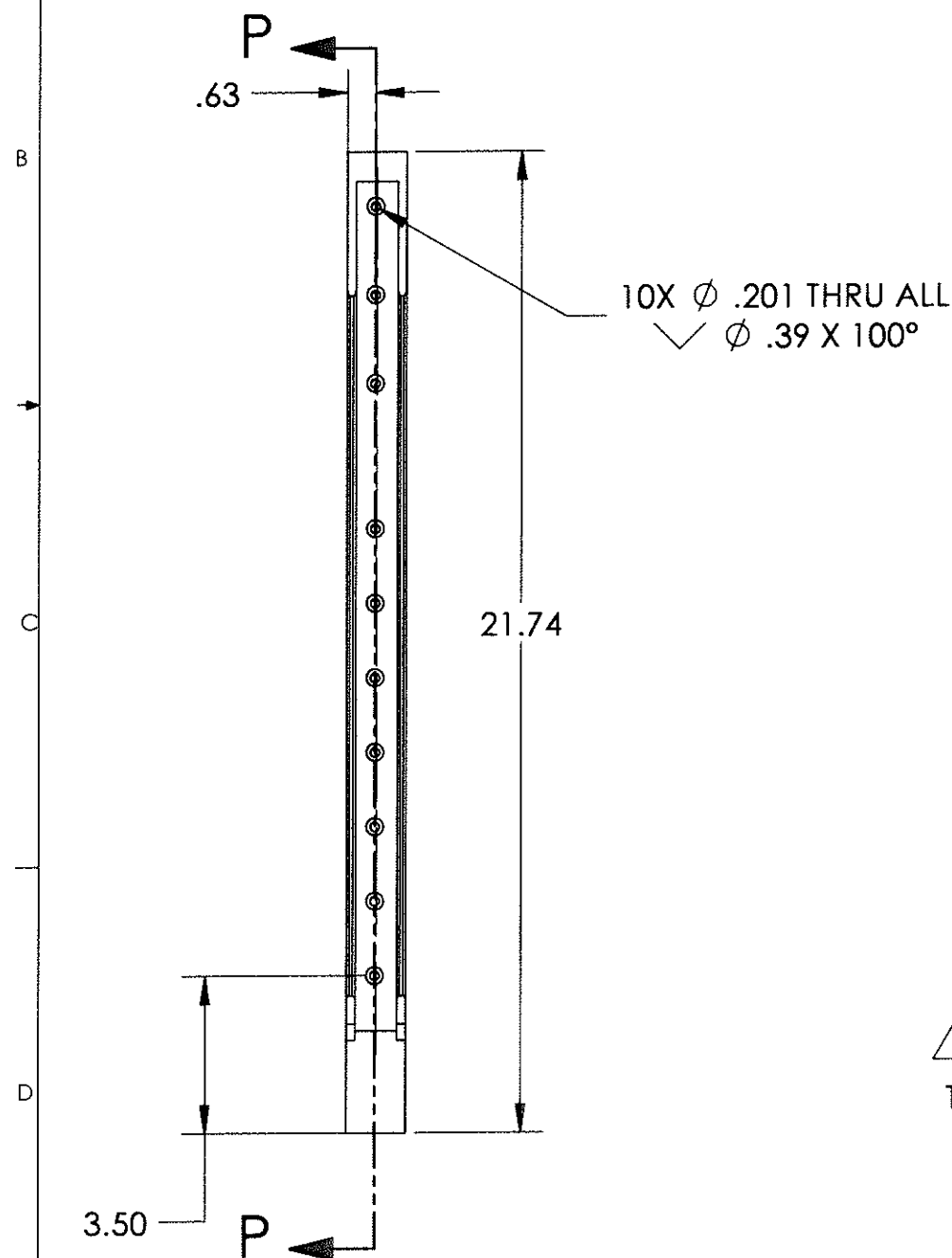
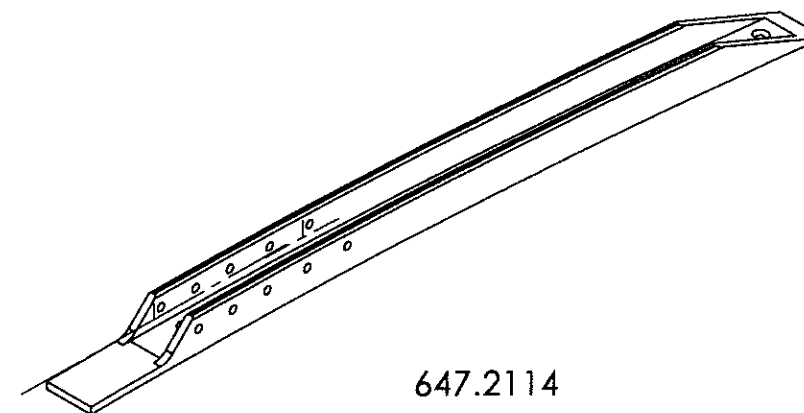


ORIGINAL DATE (MO-DA-YR) 08/05/09	DART AEROSPACE 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300		
DRAWN BY S. HUFF	CHECKER P. BRAVO	DRAWING APPROVAL P. BRAVO 08/05/09	
CONTRACT No.		MOUNTING RAIL	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°	SIZE B	CAGE CODE 07MZ6	DWG. NO. 647.2100
SCALE NONE		REV. C	
SHEET 4 OF 5			

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SECTION R-R



SECTION P-P

ORIGINAL DATE (MO-DA-YR) 08/05/09	3030 ENTERPRISE CT., SUITE A VISTA, CA, 92081 (760)-724-5300
DRAWN BY S. HUFF	CHECKER P. BRAVO
DRAWING APPROVAL P. BRAVO 08/05/09	APICAL INDUSTRIES, INC. dba DART AEROSPACE
CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ± 5°	
SIZE B	CAGE CODE 07MZ6
DWG. NO. 647.2100	REV. C
SCALE NONE	SHEET 5 OF 5